Do Empowered Front-Line Employees Perform Better?

A Non-Linear Approach and the Role of Service Complexity

Abstract

This study re-examines the influence of front-line service employee empowerment on their performance, following a non-linear approach and integrating the role of service complexity. For that purpose, data were collected through a quantitative survey on 240 front-line employees in two major UK cities (London, Leeds). The study's results indicate that empowerment has a significant impact on their performance and that this impact is non-linear (quadratic). Specifically, the relationship between empowerment and performance is negative for low-level empowerment and positive for high-level empowerment. In addition, the study's results show that the nature of this relationship is different for different levels of service complexity. Specifically, for low-complexity services, the relationship between empowerment and performance was found quadratic, whereas for high-complexity services the relationship was found positive and linear. Based on the study's main conclusions important implications for both academics and practitioners are presented.

Keywords: Front line employees, Empowerment, performance, complexity

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1. Introduction

As most service industries become more competitive and customers become increasingly demanding, delivering high-quality services is a crucial pursuit for service providers that seek to create value for their customers (Grönroos and Ravald, 2011). Through providing highquality service, companies can achieve increased customer satisfaction, loyalty and therefore competitive advantage and long-term profitability (Zeithaml and Bitner, 2000). One of the most critical factors that determine the quality of the provided service, and increased customer satisfaction as a result, is front-line employees' performance (Parasuraman, Zeithaml and Berry, 1985; Harris et al., 2014), since these employees are an inseparable part of the service offering (Lovelock, 1983). Front-line employees are not only responsible for the service delivery, but they also are the customers' main point of contact. Hence, their performance determines the effectiveness of the service encounter effectiveness and to a great extent the customers' satisfaction with the service (Bitner, 1990; Hollins and Shinkins, 2006).

In seeking to improve front-line employees' performance, service providers use many practices to increase the organisational support that employees receive and to enable them to enact their roles within service provision successfully (Karatepe and Uludag, 2008; Riggle, Edmondson and Hansen, 2009). Among the many practices that improve front-line employees' performance, increased empowerment is one of the most cited in the recent literature (e.g. Aryee et al., 2012; Fernandez and Moldogaziev, 2013; Karatepe, 2013). According to Empowerment Theory, front-line employees' empowerment reflects the degree to which 'the employees have the freedom to make decisions that influence organisational direction and performance' (Bowen and Lawler, 1992, p 35). In general, more empowered front-line

employees are considered to be more capable and willing to offer higher service quality to customers. Nevertheless, even though front-line employees' empowerment has been considered a highly beneficial practice, many studies in the literature have reported inconclusive or even contradictory results about the influence that empowerment has on employees' performance (e.g. Snipes et al., 2005; Huang et al., 2010). In fact, some researchers suggest that apart from its generally positive influence, empowerment has, under specific circumstances, negative implications for employees' performance and the service delivery in general (e.g. Martin, 1996; Klagge, 1998). At the same time, one study noted the need for more research in order to *'determine under which conditions empowerment is beneficial to service delivery'* (Snipes et al., 2005, p 1337).

Many studies have aimed to clarify the relationship between empowerment and performance by examining how these two variables are affected by the potential moderating and/or mediating effect of several other variables. The moderating and mediating variables that have been employed include role stressors (e.g. role ambiguity, role conflict); perceived workload; employees' demographic characteristics; organisational structure; coordination practices related to productivity and many others (Hartline and Ferrell, 1996; Chebat and Kollias, 2000; Kirkman et al., 2004; Avolio et al., 2004; Seibert, Silver and Randolph, 2004; Chan and Lam, 2011; Avery et al., 2013).

Although the results of these studies have shed some light on the true nature of the relationship between empowerment and performance, a significant question remains unanswered. This question relates to the influence that empowerment has on employees' performance, when all other things are equal (ceteris paribus). In other words, will a specific front-line employee, under given circumstances (e.g. conditions within a company or a certain environment), perform better if he is more empowered? This question is imperative for service providers in their pursuit of finding the appropriate levels of empowerment that will allow their

employees to satisfy individual customer needs, but at the same time ensure the necessary standardisation of the service delivery process. Aiming to close this gap in the literature and to interpret the inconclusive or contradictory results that previous studies have yielded, this study attempts to revaluate empowerment theory following a non-linear approach. In doing so, this study suggests that the overall influence of empowerment is nonlinear and non-monotonic (i.e. quadratic or cubic). This is because this study builds on previous arguments that reveal a strongly positive empowerment–performance relationship for higher levels of empowerment but an insignificant or even negative relationship for lower levels of empowerment.

Moreover, the present study suggests that this discrepancy between empowerment's influence at its lower and its higher levels is more significant for more complex services, where standardisation is even more difficult to be achieved. Therefore, service complexity is introduced as a moderating variable on the relationship between empowerment and performance. This moderating effect has been surprisingly neglected in the literature, although several times it has been associated with the beneficial influence of empowerment (Rafiq and Ahmed, 1998a, 2000). On these grounds, this study's main research objectives are: *a) to explore the true nature of the relationship between front-line employees' empowerment and performance* and *b) to test the role that service complexity has on the aforementioned relationship.*

The next section of the manuscript presents a detailed review of the literature that led us to formulate our research hypotheses, followed by the methodology used and the statistical analyses that were carried out in order to test the hypotheses. In the last two sections a discussion of the findings is presented, followed by the studies' main conclusions, limitations and interesting directions for future research that the present study opens.

2. Literature review

2.1 The positive influence of empowerment

Motivation theory suggests that employee empowerment is a form of motivation based on an employee's perception of himself or herself in relation to his or her work role (Conger and Kanungo, 1988). According to this approach, empowerment is defined as 'the ability and willingness of an employee to determine his own role within an organisation' (Spreitzer, 1995). Studies on empowerment theory follow two different approaches for the conceptualisation of employee empowerment. The first one considers empowerment as the degree to which employees have discretion to make decisions and take initiatives in their job (e.g. Hartline and Ferrell, 1996; Chebat and Kollias, 2000; Wilder et al, 2014). The second considers this discretion as only one of empowerment's dimensions, along with feedback on performance, rewards based on the organisation's performance and others (e.g. Bowen and Lawler, 1992; Speitzer, 1995, Fernandez and Moldogaziev, 2013). The present study adopts the first approach and therefore uses the concepts of employee empowerment and employee discretion interchangeably.

The pertinent literature is replete with studies that consider increased empowerment as one of the most commonly used managerial actions for the enhancement of front-line employees' performance (e.g. Boshoff and Allen, 2000; Ashill, Carruthers and Krisjanous, 2005; Chen et al., 2007; Aryee et al., 2012; Karatepe, 2013). More empowered front-line employees have more discretion over specific tasks and can take initiative in serving customers (Hartline and Ferrell, 1996). For that reason, empowered front-line employees find it easier to understand and adjust to individual customer needs. In that way, they are able to offer the necessary service customisation to customers (Wilder, Collier and Barnes, 2014).

In addition, increased empowerment improves front-line performance due to the enhancement of specific psychological factors related to employees' work roles, such as role clarity, job satisfaction, self-efficacy, etc. (Hartline and Ferrell, 1996). More satisfied and motivated employees who have clear roles find it easier to satisfy customer needs, so they are more effective in their roles (Chebat and Kollias, 2000). Finally, more empowered employees find it easier to realise how their jobs influence both the customers and their coworkers, so they perform better (Chiang and Hsieh, 2012).

2.2 The negative implications of empowerment

Despite its positive role in enhancing front-line employees' performance, empowerment can, under certain circumstances, have negative implications for a service delivery process (e.g. Hartline and Ferrell, 1996; Rafiq and Ahmed, 1998b). Several studies have stressed the risk of overwhelmingly empowering employees, since in several ways this may backfire (Chan and Lam, 2011).

The negative implications of empowerment for the service delivery are related to frontline employees' performance most of the time. Such employees often have to offer customised solutions to customers but at the same time follow specific protocols that define their roles in the service provision (e.g. Bettencourt and Gwinner, 1996; Varca, 2009). This can lead employees to be confused and/or misunderstand their roles in the service provision (Chebat and Kollias, 2000). Although formally defined procedures enable the maintenance of quality and efficiency standards, they can decrease the flexibility that front-line employees need in order to deal with unexpected customer requests (De Ruyter, Wetzels and Feinberg, 2001). This problem is amplified when the scope of employees' jobs is increased through high levels of empowerment, especially if the guidance provided by their supervisors is inadequate (Rafiq and Ahmed, 1998a). In such cases, role clarity will decrease even more and employee

performance will decline (Tubre and Collins, 2000). Furthermore, research has shown that in such cases, employees perceive increased workload, again resulting into lower productivity (Conger and Kanungo, 1988; Chan and Lam, 2011).

Another possible negative implication of empowerment pertains to the employees' conscious or unconscious disproportional use of their discretion towards customers who are more similar to themselves, depending on their demographic or behavioural characteristics (Martin, 1996). In such cases, front-line employees will favour those customers over others, increasing customer dissatisfaction (Rafiq and Ahmed, 1998a). The more empowered the employees are, the more discretion they will have to favour or disfavour specific customers and cause a perceived lack of fairness.

Finally, empowerment implies deviations from the original service plan, which is nevertheless also followed by the rest of the employees (Bowen and Lawler, 1992). During the service provision, all employees have to follow the same pre-defined procedures and if they do not enjoy the same degree of discretion, several coordination issues may occur (e.g. overlapping efforts, bottlenecks), along with an overall lower situation awareness (Salas et al., 1995). In other words, although employees' "out-of-plan" behaviours contribute to service customisation, those behaviours may be unexpected and/or undesired by their co-workers. In such cases, one employee's discretion may lead to another's confusion, resulting in lower overall performance.

2.3 The true nature of the relationship between empowerment and performance

In the previous two subsections we presented theoretical arguments proving that front-line employees' empowerment can have both positive consequences (e.g. Chen et al., 2007; Karatepe, 2013) and negative consequences (e.g. Rafiq and Ahmed, 1998a) for the service delivery. That is one of the main reasons why many pertinent studies report inconclusive or

even contradictory results on the relationship between empowerment and performance (e.g. Snipes et al., 2005; Huang et al., 2010). This shows that the true relationship between the two variables still remains to be identified.

Intending to clarify the relationship between empowerment and performance, several studies have examined the moderating and/or mediating influence that many variables have on this relationship, such as role stressors, perceived workload, employees' demographic characteristics, organizational structure, coordination practices and many others (Hartline and Ferrell, 1996; Chebat and Kollias, 2000; Kirkman et al., 2004; Avolio et al., 2004; Chan and Lam, 2011; Avery et al., 2013). Again, however, some of these studies have mixed results: In some instances, either the direct influence or the moderating and mediating effect has not been found to be significant.

Following an alternative approach in the present study, we argue that apart from the various external variables that may influence the empowerment–performance relationship, the relationship's nature and magnitude is also determined by the level of empowerment itself. That is because in its lower levels, the positive outcomes of empowerment are less likely to occur and at the same time there is a bigger chance that its negative consequences will appear. As noted in the literature, empowerment can only work when it involves transfer of meaningful power to staff (Hardy and Leiba-O'Sullivan, 1998; Bowen and Lawler, 2006). At the lower levels of empowerment, increasing front-line employees' discretion may not be perceived by employees as job autonomy, but as inadequate instructions or unnecessary lack of task standardisation. Hence, instead of improving their role clarity and self-efficacy (Hartline and Ferrell, 1996), increased empowerment may lead to confusion or even dissatisfaction, in the sense that employees will feel that they are asked to take more initiative but they are not given enough power to do so.

Moreover, minor initiatives without a real impact on customer experience, maybe perceived as deviant and not creative discretion (Kelley, 1993). In such cases, the employees will not have fulfilled their service objectives and will not have offered any additional value to the customers through their initiatives. On the contrary, employees who receive high levels of empowerment have the necessary power to adapt to individual customer needs. Therefore, any increase in the degree to which they are empowered can only lead to even better adaptation and therefore improved performance (Chiang and Hsieh, 2012; Wilder, Collier and Barnes, 2014). Finally, for higher levels of empowerment, communication will be more flexible among the employees, which means they will find it easier to overcome any coordination issues amongst them, a phenomenon that, as previously explained is considered as one of the major risks of increased empowerment.

Based on these arguments, it is reasonable to assume that empowerment theory is correct and that empowerment has an overall positive influence on employee performance. However, this overall influence is mostly determined by the positive impact from higher levels of employee empowerment; for lower empowerment levels, this relationship is more likely to be negative. This implies that the relationship between empowerment and performance is nonlinear, non-monotonic and specifically either quadratic or cubic. A non-linear relationship will reflect the negative impact of empowerment for its lower levels and its positive influence for the higher levels. Hence, we pose the following research hypotheses:

H1: *Front-line employees' empowerment significantly influences their performance.*

H2: *The effect of front-line employees' empowerment on their performance is a non-linear, non-monotonic (quadratic or cubic) one. At lower levels of empowerment, the effect will be negative, and for the higher levels of empowerment it will be positive.*

2.4 The moderating role of service complexity

There are many arguments in the pertinent theory suggesting that the relationship between front-line employees' empowerment and performance differs according to the service complexity (Rafiq and Ahmed, 1998a; Wall, Cordery and Clegg, 2002). Most studies consider service complexity a structural characteristic of the service, which is conceptualized and measured through objective operational measures such as the number of the intermediate steps or the duration of the delivery (Martinez-Tur, 2001; Zeynep Aksin and Masini, 2008; De Castro Lobo et al., 2010). On this basis, service complexity can be defined as 'the number and intricacy of steps required to perform the service' (Shostack, 1987, p 35). However, two additional approaches in defining and measuring service complexity prevail in the literature: a) through the perceptions of customers (e.g. Simon and Usunier, 2007; Mikolon et al., 2015) and b) through the perceptions of employees (e.g. Zeynep Aksin and Masini, 2008; Kostopoulos, Gounaris and Boukis, 2012).

Without diminishing the value of the other two approaches, in the present study the third approach is followed. This is because, since the main aim of the study is to explore how the sense of empowerment can influence employees' performance, objective assessments of service complexity could be misleading, as they do not take into account the cognitive effort of the employees in delivering the service. According to the Job Demands-Resources (JD-R) model though, employees' psychological and mental state mediates the causal chain from job demands to job outcomes (Crawford et al., 2010). Structural characteristics of jobs, such as complexity, influence employees' performance through the impact they have on their individual cognitive perceptions (Demerouti et al., 2001). In fact, the same level of objective complexity within a service process may have a different mental and psychological effect on different individuals. Hence, the impact of complexity on the relationship between

empowerment and performance can only be assessed accurately when accommodating employees' perceptions of service complexity.

Regardless of the approach followed to conceptualize service complexity though, it is clear that for different levels of complexity, empowerment will have a different effect on front-line employees. Specifically, as Wall, Cordery and Clegg (2002) proposed, when operational uncertainty – a construct (very similar to complexity) related to the knowledge and resources required for an employee to be able to carry out a job task – is high, increased empowerment will improve employees' performance. The main reason for this is that employees who participate in more complex services have to deal with more difficult tasks and therefore need more latitude to make decisions (Peters and Savoie, 1996). For such services, the need for empowerment is higher, and so is empowerment's positive influence on employees' performance. Additionally, more empowered employees will find it easier to deal with the increased customer participation and/or the extraordinary customer demands associated with complex services (Ottenbacher, Gnoth and Jones, 2006). This is why it is reasonable to argue that for more complex services, a strong, linear and positive relationship between front-line employees' empowerment and performance is more likely to prevail for all empowerment levels and for that reason we pose the following research hypothesis:

H3: *For services of high complexity, the effect of front-line employees' empowerment on their performance is positive and linear.*

For simpler services, the tasks the employees have to carry out are fewer and easier; customer participation is normally less intense; and customer preferences and demands are more homogenous (Shostack, 1987; Silvestro et al., 1992; Holm, Kumar and Rohde, 2012). For such services, the need for empowerment is not so high, since there are fewer knowledge requirements and fewer opportunities to take initiative for employees (Wall, Cordery and Clegg, 2002). According to empowerment theory, employee empowerment may not

necessarily be needed for simpler task environments and for tasks with low level of goal ambiguity (Bowen and Lawler, 1995).

The lower necessity for empowerment, puts its positive impact on performance under question for services of low complexity. The main danger is that, if not imperative, increased empowerment may generate all its negative effects. However, this seems to be true only for the lower levels of empowerment (Rafiq and Ahmed, 1998b). That is because for simpler tasks, employees may prefer to perform them by just following the service script and want to take initiatives only if this can be translated into meaningful discretion that will allow them to offer customised solutions for customers. This means that for the lower levels and for simpler tasks, the effect of empowerment on performance maybe negative, whereas for the higher levels of empowerment the positive effect of empowerment will occur. Therefore, we posit:

H4: *For services of low complexity, the effect of front line employees' empowerment on their performance is non-linear (quadratic or cubic).*

INSERT FIGURE 1 AROUND HERE

3. Methodology

3.1 Sample and data collection

In order to empirically test our research hypotheses, we carried out primary quantitative research with the use of structured questionnaires. This method was chosen in order to ensure the results' generalisability to the overall population (Parasuraman, Grewal and Krishna, 2006). Data collection was carried out through a two-stage cluster sampling method. First, 500 organisations were randomly selected from a list of all organisations in four service sectors (Hotels, Restaurants, Banks and Universities) in two UK major cities (London and Leeds). The list of organisations was compiled using data from Companies House, UK. The two cities were

chosen for two reasons: a) they are the two largest business centres in the UK and b) they represent two significantly different geographical and cultural parts of the UK. Similarly, the four sectors were chosen, because the front line employees that work in them offer services of a wide range complexity (Shostack, 1987). Specifically, in all four sectors front line employees offer several services that may be perceived by them from very simple to extremely complicated (e.g. for university lecturers, services will vary from a simple email response to the delivery of a complicated MBA lecture and for hotel receptionists, services will vary from a simple check out to the management a very complex customer complaint). This is crucial for the current study, because the comparison of the empowerment-performance relationship's nature between low complexity services and high complexity services is an imperative aim of the study.

The 500 selected organisations were approached to give us permission to address the questionnaire to their front line employees. Specifically, an initial email was sent to either a member of the corporate communications team or a senior manager followed by a phone call three days later. After communication was established with all 500 organisations, permission to contact their front line employees was given by 120 of them. No significant differences were observed between the organisations that agreed to participate in the study and those that didn't in terms of their size, sector or organisational characteristics. In each of the organisations we randomly selected five front-line employees and contacted them during their work time after getting authorisation from their supervisor. Of the 600 customer-contact employees who were asked in total, 240 agreed to complete the questionnaire deriving a response rate of 40% (57.5% of them worked in organisations in London and 42.5% in Leeds). No systematic differences were observed between the employees who agreed to participate and those who didn't, in terms of their demographic characteristics, their job titles and the organisations they worked in. Eventually, all participants completed the questionnaire individually during their work time, at

their organisation's premises. In all cases a fellow researcher was present during the completion of the questionnaire.

All study's main variables were tested for potential differences between the two cities and the four sectors. The results of the relevant t-test showed that the differences between employees in London and employees in Leeds are not significant (Empowerment: T=0.271, p>0,05; Performance, T=0.26, p>0.05 and Service Complexity: T=0.898, p>0.05). Similarly, the results of the pertinent ANOVA tests indicate that there are no significant differences among employees in the four different sectors (Empowerment: F=1.048, p>0,05; Performance, F=0.401, p>0.05 and Service Complexity: F=0.174, p>0.05). Finally, since several employees worked in the same organisations, the intraclass correlations of the three variables were calculated using the organisation as grouping level. All three intraclass correlations were below 0.2, which shows that no organisational effected were detected (Maas and Hox, 2005).

3.2 Operationalisation of variables

For all study's constructs, we have employed existing scales previously developed and tested by other researchers. Specifically, an adaptation of the scale developed by Bettencourt and Brown (1997) has been employed to measure employee role performance from an employees' perspective. The scale includes five items that capture the degree to which each front-line employee *'performs all those tasks for customers that are required of him/her'; 'meets formal performance requirements when serving customers'; 'fulfils responsibilities to customers as specified in the teller job description'; 'adequately completes all expected customer-service behaviors';* and *'helps customers with those things which are required of him/her*'. In order to capture employee empowerment, an adaptation of a scale developed and validated by Hartline and Ferrell (1996) has been used that includes five items that capture the degree to which each employee feels that he or she *'is allowed complete freedom in his/her work'; 'is allowed to use his/her own judgment in solving problems'; 'is encouraged to take*

initiatives'; 'is allowed to do his/her work the way he/she thinks best'; and *'is trusted to exercise good judgment'.*

Finally, for the measurement of perceived service complexity, an adaptation of the scale developed and validated by Kostopoulos, Gounaris and Boukis (2012) has been employed, which includes six items capturing the degrees of employees' perceptions to which *'the delivery of the service involves the completion of many tasks'; 'the tasks that they have to execute in order to deliver the service are very difficult'; 'it requires a lot of knowledge to completely understand the service we provide to the customers'; 'it takes as a lot of time to execute the tasks involved in the delivery of the service'; 'it is difficult to predict customers' behaviour during the service delivery'; 'there are many alternative ways to serve the customers, depending on their preferences';* and *'it requires a lot of knowledge to completely understand the service'.*

The items that were included in all scales were seven-point Likert-type, with anchors ranging from 'strongly disagree' (1) to 'strongly agree' (7). The scales and the items' face validity was tested through in-depth interviews with 8 fellow academics. All academics agreed that the scales and the items measured what they were intended to measure and no change in the wording was suggested. Then the questionnaire was pre-tested on a convenience sample of 30 customer service employees. The results of the initial analysis (Cronbach's Alpha, item to total correlations) indicated that all scales' items should be included in the main study. Moreover, q-sorts test results showed that all items reflect the constructs they were supposed to.

Confirmatory factor analysis was applied for all scales, with the use of EQS 6.2 software, to examine their unidimensionality as well as their discriminant and convergent validity (Table 1). In all cases, the measures were found unidimensional and valid as indicated by the fit indices that are most commonly used in the pertinent literature (Byrne, 2006). Moreover, all scales

fulfil the criteria of discriminant and convergent validity, since the percentage of the latent variables' explained variance (average variance extracted, or AVE) is more than 50% for all variables and also higher than the highest squared correlation between the variables (Fornell and Larcker, 1981). All measures were also examined for internal consistency as reflected by construct reliability, which was assessed through the calculation of the Cronbach's alpha coefficient and composite reliability (CR). As shown in Table 1, both coefficients' value was substantial (> 0.7) for all multi-item scales, which shows that all of them can be considered reliable (Nunnally, 1978; Fornell and Larcker, 1981). As the scales were found to be unidimensional, reliable and valid for each variable, the data were aggregated into a single measurement by calculating the average of each scale's items. The new measurements were then used in all further statistical analyses.

INSERT TABLE 1 AROUND HERE

Since obtaining data from a single sample unit increases the risk of common method variance (Podsakoff et al., 2012), before moving to hypotheses testing, the study's variables were tested for common method bias. This was done through the estimation of the variables partial correlations, using a conceptually irrelevant measurement as control variable, which was included in the study's questionnaire for that purpose. The scale used captured employees attitude towards change, which is a variable that satisfies three necessary criteria to be used as a control variable (Lindell and Whitney, 2001): a) it is a reliable scale (Cronbach's Alpha = 0,882), b) it's not conceptually correlated to any of the three main variables of the study (empowerment, performance, perceived complexity) and c) it's not conceptually identical to any of the three. As shown in Table 2, the partial correlations are very similar to the correlations without the control variable, which indicates that the relationships between the study's variables are not determined by common method variance.

INSERT TABLE 2 AROUND HERE

4. Data analysis

4.1 Descriptive statistics

Of the 240 front-line employees who participated in the study, 125 were female (52.08%) and 115 male (47.92%). The average age of the participants was 32.91 years (SD: 9.55), and their average working experience was 11.40 years (SD: 7.6) Regarding the service sectors in which they were employed, 75 worked in bars and restaurants (31.25%), 65 in the hospitality industry (27.08%), 53 in UK universities (22.08%) and 45 in the financial sector (18.75%). The participants' job titles also varied. Specifically, 26% of the participants worked as receptionists, 33% as waiters and/or bartenders, 14% as university lecturers or tutors, 8% as administrative personnel in universities, 12% as bank tellers and 7% as financial advisors. Finally, as far as the respondents' education is concerned, 1.25% of them were primary school graduates, 45% of them secondary education graduates, 38% higher education graduates (undergraduate level) and 16% education graduates (postgraduate level).

Regarding the three self-addressed variables' descriptive statistics, as shown in Table 3, the average empowerment was 4.74 (SD: 1.66), the average perceived service complexity was 5.05 (SD: 1.17) and the average performance was 5.11 (SD: 1.23). Finally, the values of the kurtosis and asymmetry coefficients for all variables are between -1 and 1, and the p-value of the Kolmogorov-Smirnov normality test for all variables is above 0.05. These results indicate that the summative variables used can be considered continuous and that they follow a normal distribution in approximation. Hence, they are suitable for use in a regression model.

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4.2 Testing the influence of empowerment on performance

In order to explore the effect that front-line employees' empowerment has on their performance, and thereby test the validity of hypotheses H1 and H2, we used hierarchical regression analysis. Specifically, we estimated four hierarchical regressions with employee performance as the dependent variable: a) one with two control variables (Age, Gender) as independent variables, b) one with the control variables and empowerment as independent variables, c) one with the control variables, empowerment and the quadratic term as independent variables and d) one with the control variables, empowerment, the quadratic and the cubic term as independent variables.

As shown in Table 4, the control model has a very low fit, as the influence of both age and gender is not significant. In the other three models the direct influence of empowerment on performance is significant ($p < 0.01$ for the linear and quadratic models; $p < 0.05$ for the cubic model). This implies that empowerment has a significant influence on performance and therefore H1 is supported.

In order to determine the nature of the aforementioned relationship, the three hierarchical regression models (one linear and two non-linear) were compared in terms of a) the significance of the regression coefficients (beta coefficients); b) the models' goodness of fit (adjusted R^2 and F Change) and c) the trade-off between the models' goodness of fit and their relative complexity (Akaike information criterion and Bayesian information criterion, or AIC and BIC, respectively). The results (Tables 4 and 5) indicate that the quadratic model has a significantly greater goodness of fit than the linear (adjusted $R^2 = 0.321$, F change = 20.915) and that the beta coefficient for the quadratic term is indeed significant ($p < 0.01$). The values of the AIC and the BIC (or Schwartz) criteria (Table 5) are also significantly smaller for the quadratic model than the linear (Kass and Raftery, 1995; Burnham and Anderson, 2004). This indicates that the quadratic model is preferable to the linear. On the other hand, in the cubic

model, the cubic term's coefficient and the change in the F statistic are not significant ($p > 0.05$). Based on these results, it is reasonable to conclude that out of the three models, the quadratic is the most suitable, and therefore hypothesis H2 is accepted.

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4.3 The moderating role of service complexity

In the next step of the analysis, we investigated the relationship between front-line employees' empowerment and performance for different levels of service complexity. To do so, we estimated the four hierarchical regressions with employee performance as the dependent variable separately for low-complexity services and high-complexity services. In the present study, service complexity was measured by the front-line employees' perceptions of how complicated their offered services are. In order to divide our sample into high- and low-complexity perceived service, a median split process was followed. Specifically, the summative scale's median score was calculated (5.166), and all observations above it are considered high-complexity, whereas all observations below it have been deemed low-complexity.

For low-complexity services (Table 6), the control model has a very low fit, as the influence of both age and gender is not significant. Moreover, the results indicate that the quadratic model should be preferred to the linear, since it has significantly greater goodness of fit (adjusted R^2 quadratic = 0.273, F change = 22.375); the coefficient for the quadratic term is statistically significant ($p < 0.01$); and the values of the two information criteria (AIC, BIC) are lower. The cubic model should not be preferred to the linear or quadratic because, although it has a slightly

bigger explanatory power, the cubic term is insignificant ($p > 0.05$) and so is the change in the F statistic ($p > 0.05$). Based on these results, H3 is accepted.

INSERT TABLE 6 AROUND HERE

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For high-complexity services (Table 7), the control model was again found to have a very low fit. The results also indicate that the linear and the quadratic models have similar goodness of fit (adjusted R^2linear = 0.384, Adj. R^2quadratic = 0.393, Adj. R^2cubic = 0.400, Fchangequadratic = 2.709, Fchange-cubic = 3.414). Moreover, in the linear model, the coefficient for the empowerment variable was found significant ($p < 0.01$), whereas in the quadratic the coefficients of both the empowerment variable and the quadratic term are not significant ($p > 0.05$). This shows that the linear model is preferable to the quadratic. For similar reasons, the linear model is preferable to the cubic model as well, as in the cubic model the coefficients for empowerment and the cubic term are not significant ($p > 0.05$).

Hence, the results indicate a linear relationship and H4 is supported. To sum up, the service complexity variable has a moderating effect on the relationship between empowerment and performance, since for low-complexity services this relationship is nonlinear (quadratic), and for high-complexity services it is linear.

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5. Conclusions and discussion

This study's main aim is to investigate the nature of the relationship between front-line employees' empowerment and performance, and to shed light onto the inconclusive, or even contradictory results that several previous studies have reported (e.g. Snipes et al., 2005; Huang

et al., 2010). Some very useful conclusions are derived from the present study, which contributes to the clarification of the relationship between empowerment and performance.

The first important conclusion relates to how front-line employees' empowerment impacts their performance. Specifically, the study's results confirm previous studies on the significance of empowerment's influence on performance (e.g. Hartline and Ferrell, 1996; Karatepe, 2013) but indicate that this influence is non-linear (quadratic). The quadratic relationship nature indicates that this relationship will be negative for the lower levels of empowerment and positive for the higher levels. This happens because, as noted in the literature, empowerment can only work when it involves transfer of meaningful power to staff (Hardy and Leiba-O'Sullivan, 1998; Bowen and Lawer, 2006).

For the lower levels of empowerment, its negative consequences may occur. Among others, these negative consequences include increased role ambiguity; a perception of increased workload; lower productivity; conscious or unconscious disproportional use of their discretion towards customers that are more similar to themselves, depending on demographic or behavioural characteristics; and poor employees' coordination (Salas et al., 1995; Hartline and Ferrell, 1996; Martin, 1996; Honegger and Appelbaum, 1998; Rafiq and Ahmed, 1998b; Tubre and Collins, 2000). However, for higher levels of empowerment, front-line employees will have meaningful discretion to offer tailored services to customers. Therefore, if their sense of empowerment increases, they will have even more opportunities to successfully take initiatives and adjust their behaviour to individual customer needs (Wilder, Collier and Barnes, 2014), which is a crucial determinant of their performance.

This conclusion is very important for both academics and practitioners because, as far as we are aware, this is the first study indicating such a non-linear relationship between empowerment and performance. The non-linearity of this relationship indicates that the positive influence of empowerment occurs only after a specific threshold. Therefore, managers

who want to improve their front-line employees' performance though empowerment will have to create an environment that reflects high levels of empowerment. This may include the extending the employees' responsibilities and allowing them to assume initiative with the simultaneous development of their pertinent skills and experience. If the efforts to increase empowerment are not complete and the front-line employees receive low levels of discretion, then there is a good chance that these efforts will be in vain or even harmful. Therefore, if service managers cannot facilitate high degree of empowerment, they should find ways to improve employees' performance other than increased empowerment, such as standardised service design procedures and standardised training of employees.

Our second conclusion is that the relationship between front-line employees' empowerment and performance is different for services of low complexity than for services of high complexity. Specifically, for low-complexity services, the relationship between employees' empowerment and performance is quadratic and specifically negative for the lower levels of empowerment, yet positive for the higher levels of empowerment. On the other hand, for high-complexity services, the relationship employees' empowerment and performance becomes positive and linear.

This means that for more complex services there is a greater need for empowerment, since for all levels of empowerment, its influence will be significant and positive. In complex services, the tasks the employees have to carry out are difficult, and customer participation is more intensive. Therefore, front-line employees should be more empowered in order to be able to take initiative and customise the service offering (Ottenbacher, Gnoth and Jones, 2006). Even if the levels of empowerment are low, if additional discretion is offered to employees, this will have a beneficial influence on their effectiveness. That confirms the hypothesis that for complex services, along with all other managerial practices, increasing

front-line employees' empowerment should always be a goal for managers, regardless of the empowerment levels they can achieve.

In contrast, for simpler services, the study's results indicate that the relationship between empowerment and performance is quadratic and specifically positive for the higher levels of empowerment and negative for the lower levels. This happens because the need for empowerment is less for simpler services (Rafiq and Ahmed, 1998b): Front-line employees carry out fewer and easier tasks, and participation with customers is normally less intense (Shostack, 1987; Silvestro et al., 1992; Holm, Kumar and Rohde, 2012). For that reason, there are fewer requirements in knowledge and skills as well as less need for employee initiative. This means that empowerment's beneficial nature will occur only for very empowered employees, whereas for lower levels of empowerment, some of its negative consequences may occur.

This is a very important conclusion for researchers and practitioners because, to our knowledge, this is the first study that incorporates the moderating role of service complexity in the examination of the aforementioned relationship, proving that employee empowerment should be handled differently for low-complexity services compared to those of high complexity.

6. Limitations and suggestions for further research

The present study has several limitations that do not undermine the importance of the research, yet should be taken into consideration by future researchers. The first limitation pertains to the relatively narrow scope of the study's perspective. In the present research, we examined only the influence of front-line employees' empowerment on their performance, along with the moderating role of service complexity. Future research should also re-examine the influence of empowerment on other organisational outcomes, such as employee job

satisfaction, as well as the influence of empowerment on customer-related variables such as service quality and customer satisfaction. Besides service complexity, future research should investigate other variables' moderated roles on the relationship between empowerment and performance (e.g. employees' skills and training). Similarly, the nature of the present study is merely explanatory. Although the study's results are consistent with previous research, future research should attempt to offer a deeper understanding on why the relationship between empowerment and performance is non-linear under specific circumstances. This deeper understanding can be based for example on the classic work of Pateman (1970) on pseudo-participation and the overestimation of employees' willingness to actively participate in making decisions.

Another important limitation of the study is that all variables were captured via self reporting measurements. Although this method of measuring the study's main variables (empowerment, performance complexity) is very commonly used in the existing literature (e.g. Hartline and Ferrell, 1996; Mikolon et al, 2015), future research should also test our study's results following a different approach which will be based on independent, objective measures of the variables, such as the actual number of scenarios prescribed for the employees, structural characteristics of the service, range of the decisions employees can make etc. This will augment the current conceptualisation of empowerment and complexity and validate the results of the current study.

Moreover, another suggestion for future research is to test the validity of the non-linear relationship between empowerment and performance in different sectorial, cultural and national contexts. This will increase the generalisability of the study's results and/or indicate the contexts under which this relationship is actually non-linear. For example, in more bureaucratic sectors or cultural environments the negative impact of environment is more likely to occur, since in these sectors and cultures the structures are more hierarchical and empowered

employees do not necessarily perform in a better way. Similarly, the moderating role of service complexity may be different, because in such environments increased perceived complexity is normally dealt with via formal procedures not via increased empowerment.

For the same reasons, the study could be replicated for employees who do not engage in customer contact. This type of employees do not have to deal with diverse customer preferences and hence role standardisation may be easier and the need for empowerment less pertinent. Hence, and especially for low complexity tasks and for the lower levels of empowerment, the latter may not have a positive influence on employee performance. Finally, further research could test the non-linear relationship between empowerment and performance following a multilevel approach, using individual organisations as a group level. This will allow for the re-examination of empowerment's influence on employees' performance both at inter-organisation and at intra-organisation level.

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Figure 1: Conceptual framework

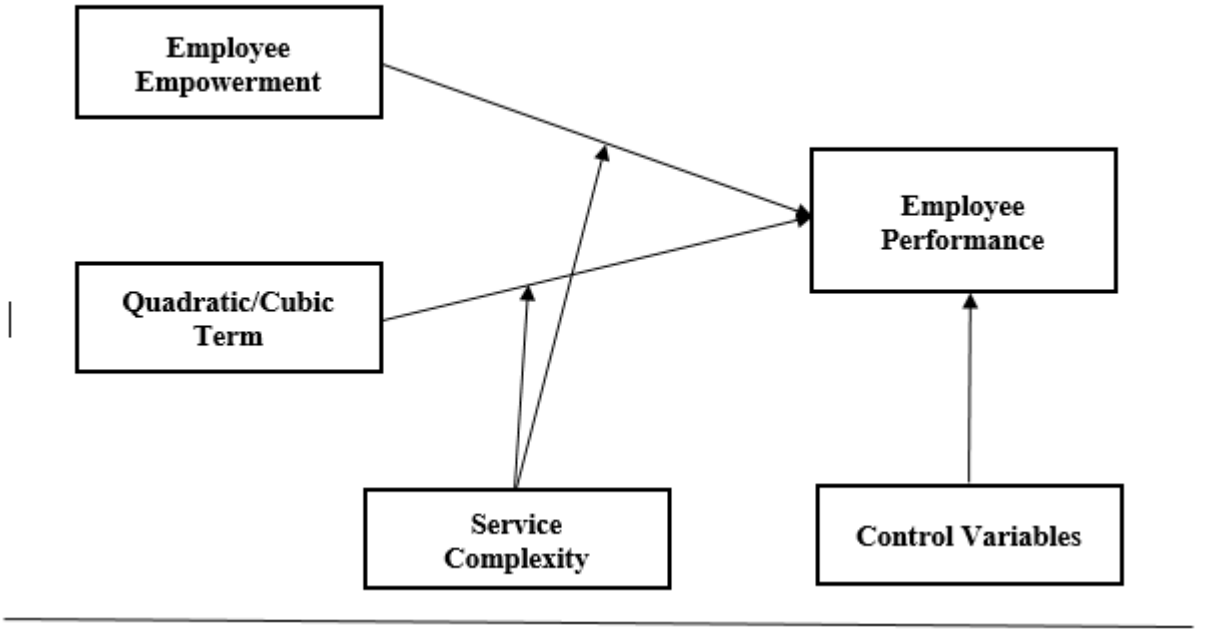

Figure 2: Observed Values and Linear, Quadratic and Cubic Predictions of Performance by Level of Empowerment (Total Sample)

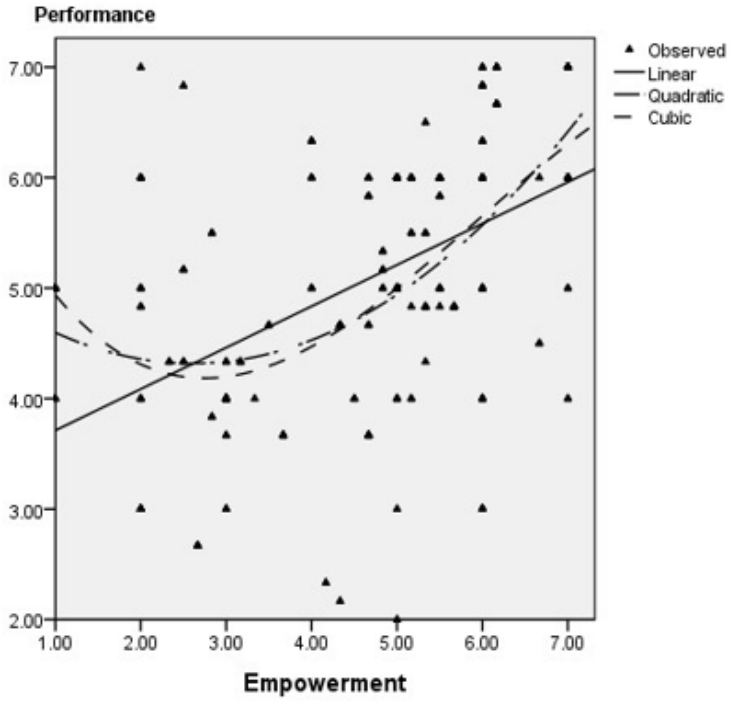

Figure 3: Observed Values and Linear, Quadratic and Cubic Predictions of Performance by Level of Empowerment (Low Complexity)

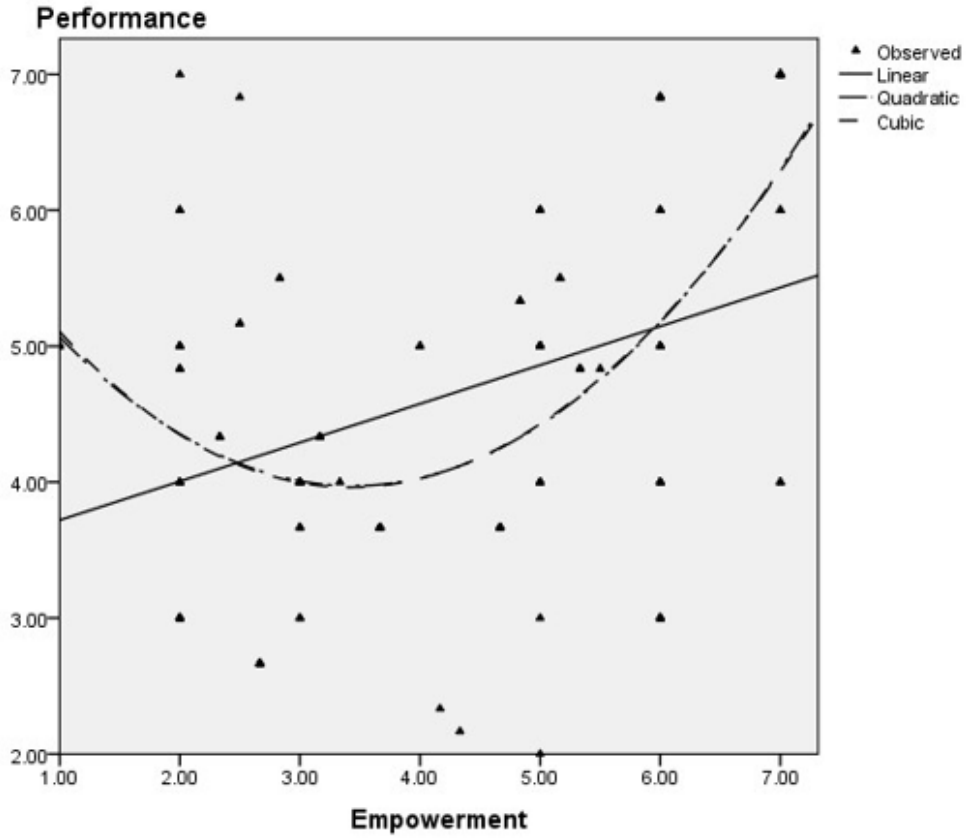

Figure 4: Observed Values and Linear, Quadratic and Cubic Predictions of Performance by Level of Empowerment (High Complexity)

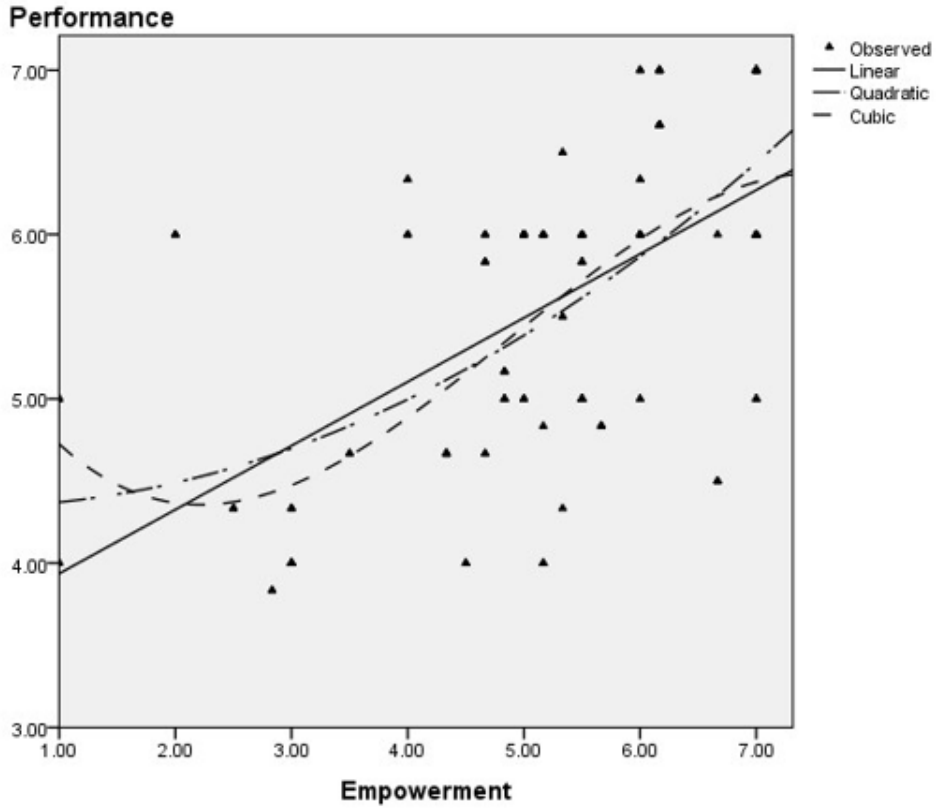

Table 1: Validity and reliability tests

Constructs	CFI	TLI	RMSEA	AVE	Max Correlation^2	CR	Cronbach's alpha
Employee Empowerment	0.940	0.923	0.070	0.62	> 0.259	0.87	0.896
Employee Performance	0.917	0.908	0.078	0.62	> 0.259	0.81	0.913
Service Complexity	0.930	0.921	0.081	0.58	> 0.259	0.80	0.875

Table 2: Correlations, Partial Correlations and AVE

Control Variable: *Attitude Towards Change*	Employee Empowerment	Employee Performance	Service Complexity
Employee Empowerment	***0.62***	0.509**	0.278**
Employee Performance	*0.509***	***0.62***	0.508**
Service Complexity	*0.274***	*0.506***	***0.58***

***** Significant at 0.01 level***

Table 3: Descriptive statistics

Constructs	Mean	St Dev	Skewness	Kurtosis	Normality Test
Employee Empowerment	4.737	1.66697	-.495	-.728	0,281
Employee Performance	5.045	1.17116	-.338	-.468	0,088
Service Complexity	5.110	1.22530	-.217	-.720	0,054

Table 4: Regression models for the complete sample

Model	Standardized Beta	t-value	Adj.R^2	F Change
Control				
$PER_i = b_o + b_1AGE_i + b_2GEN_i + e_i$				
AGE	-0.129	-2.001	0.008	2.016
GEN	0.005	0.072		
Linear				
$PER_i = b_o + b_1AGE_i + b_2GEN_i + b_3EMP_i + e_i$				
AGE	-0.115	-2.070*	0.264	83.365**
GEN	0.023	0.409		
EMP	0.507	9.130**		
Quadratic				
$PER_i = b_o + b_1AGE_i + b_2GEN_i + b_3EMP_i + b_4EMP_i^2 + e_i$				
AGE	-0.099	-1.851	0.321	20.915**
GEN	0.038	0.711		
EMP	-0.750	-2.678**		
EMP*EMP	1.282	4.573		
Cubic				
$PER_i = b_o + b_1AGE_i + b_2GEN_i + b_3EMP_i + b_4EMP_i^2 + b_5EMP_i^3 + e_i$				
AGE	-0.091	-1.690	0.325	2.088
GEN	0.037	0.695		
EMP	-2.039	-2.181*		
EMP*EMP	4.234	2.053*		
EMP*EMP*EMP	-1.707	-1.445		

** $p < 0.01$, * $p < 0.05$, GEN: Gender, EMP: Empowerment, PER: Performance

Table 5: AIC and Schwartz (BIC) criteria tests

Model	AIC	BIC
Complete sample		
Linear	28.461	35.423
Quadratic	9.555	**19.997**
Cubic	**8.820**	22.743
Low-complexity services		
Linear	42.956	48.782
Quadratic	**24.947**	**33.685**
Cubic	26.886	38.536
High-complexity services		
Linear	-61.520	-56.231
Quadratic	-60.700	-52.767
Cubic	-65.762	-55.184

Table 6: Regression models for the low-complexity services

Model	Standardized Beta	t-value	Adj.R^2	F Change
Control				
$PER_i = b_o + b_1AGE_i + b_2GEN_i + e_i$				
AGE	-0.139	-1.498	0.006	1.339
GEN	0.040	0.433		
Linear				
$PER_i = b_o + b_1AGE_i + b_2GEN_i + b_3EMP_i + e_i$				
AGE	-0.104	-1.201	0.138	18.862**
GEN	0.071	0.814		
EMP	0.374	4.343**		
Quadratic				
$PER_i = b_o + b_1AGE_i + b_2GEN_i + b_3EMP_i + b_4EMP_i^2 + e_i$				
AGE	-0.077	-0.967	0.273	22.375**
GEN	0.083	1.038		
EMP	-1.655	-3.795**		
EMP*EMP	2.066	4.730**		
Cubic				
$PER_i = b_o + b_1AGE_i + b_2GEN_i + b_3EMP_i + b_4EMP_i^2 + b_5EMP_i^3 + e_i$				
AGE	-0.077	-0.951	0.267	0.004
GEN	0.083	1.035		
EMP	-1.743	-1.227		
EMP*EMP	2.264	0.737		
EMP*EMP*EMP	-0.112	-0.065		

** $p < 0.01$, * $p < 0.05$, GEN: Gender, EMP: Empowerment, PER: Performance

Table 7: Regression models for the high-complexity services

Model	Standardized Beta	t-value	Adj.R^2	F Change
Control				
$PER_i = b_o + b_1AGE_i + b_2GEN_i + e_i$				
AGE	-0.097	-1.069	0.010	1.603
GEN	-0.126	-1.380		
Linear				
$PER_i = b_o + b_1AGE_i + b_2GEN_i + b_3EMP_i + e_i$				
AGE	-0.133	-1.857	0.384	72.693**
GEN	-0.096	-1.340		
EMP	0.612	8.526**		
Quadratic				
$PER_i = b_o + b_1AGE_i + b_2GEN_i + b_3EMP_i + b_4EMP_i^2 + e_i$				
AGE	-0.124	-1.736	0.393	2.709
GEN	-0.086	-1.198		
EMP	-0.060	0.176		
EMP*EMP	0.565	1.646		
Cubic				
$PER_i = b_o + b_1AGE_i + b_2GEN_i + b_3EMP_i + b_4EMP_i^2 + b_5EMP_i^3 + e_i$				
AGE	-0.111	-1.565	0.40	3.414
GEN	-0.094	-1322		
EMP	-1.957	-1.712		
EMP*EMP	5.415	2.046*		
EMP*EMP*EMP	-2.912	-1.848		

** $p < 0.01$, * $p < 0.05$, GEN: Gender, EMP: Empowerment, PER: Performance